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(54) Title: METHODS OF IDENTIFYING OPTIMAL VARIANTS OF PEPTIDE EPITOPES

Amino Acid Sequence	Binding IC ₅₀ (nM)	# Isolates	Predicted Cross-reactivity		Immunogenicity (SU)
			MTNPPPIPV	MTSNPPPIPV	
MTSNPPPIPV	52.8	60	-	+	10
MTNPPPIPV	128.4	33	+	+	100
MTSNPPVPV	21.8	26	-	+	1000
MTGNPPPIPV	125.1	15	-	+	10000
MTGNPPVPV	2021	9	-	+	10
MTNPPVPV	85.6	6	+	+	100
MTANPPVPV	20.0	3	-	+	1000
MTHNPPPIPV	167.0	2	+	-	100
MTANPPPIPV	2.3	1	-	+	1000
MTSDPPPIPV	107.4	1	-	+	100
MTGNPSPVPV	15.8	1	-	+	100
MTGNPAIPV	1200	1	-	+	100
MTSNPAIPV	1465	1	-	+	100
MTRNPPVPV	9171	1	-	-	100

(57) Abstract: The present invention is directed to methods for selecting a variant of a peptide epitope which induces a CTL response against another variant(s) of the peptide epitope, by determining whether the variant comprises only conserved residues, as defined herein, at non-anchor positions in comparison to the other variant(s). The present invention is also directed to variants identified by the methods above; peptides comprising such variants; nucleic acids encoding such variants and peptides; cells comprising such variants, and/or peptides, and/or nucleic acids; compositions comprising such variants, and/or peptides, and/or nucleic acids, and/or cells; as well as therapeutic and diagnostic methods for using such variants, peptides, nucleic acids, cells, and compositions.



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